

have separated them. The large size of the centro-dorsal and the lateral flattening of the rays appear in both types. But in *Antedon similis* the greater part of the second radials is concealed (Pl. XLVII. fig. 1), which is not the case in *Antedon brevicuneata*; while the lower pinnules are smaller in the latter type, though it is individually of larger size and has palmar axillaries developed on all the secondary arms instead of on the outer arms of each ray only. The fourth pinnule of *Antedon similis* is similar to and of almost the same length as the third; whereas in *Antedon brevicuneata* it is a good deal shorter and has a smaller number of joints. It is in the proportions of these pinnules and the characters of the second radials that the chief difference between the two types presents itself.

One of the arms of this specimen bore a *Myzostoma*-cyst of a somewhat peculiar type. It was entirely independent of the arm- and pinnule-joints, but consisted of a number of relatively large granules of limestone, irregularly aggregated together on the ventral surface of the arm.

8. *Antedon occulta*, n. sp. (Pl. XLVIII. figs. 1, 2; Pl. XLIX. figs. 3, 4).

*Specific formula*—A.2.2.2. $\frac{bc}{b}$ .

Centro-dorsal a thick disk, reaching 6 mm. in diameter, and bearing thirty-five to forty-five marginal cirri. These have twenty-five to thirty tolerably uniform joints, the later ones compressed laterally with a slight dorsal keel which passes into a faint spine on the penultimate.

The first radials are entirely concealed, together with the greater part of the second and also part of the axillaries. The rays may divide four times, and the lower joints of adjacent rays are in close lateral contact and somewhat flattened, but are not specially straight-edged. Each division is of two joints, the axillary without a syzygy and often somewhat unsymmetrical. Thirty-six to forty-eight arms, of about one hundred and seventy smooth joints, the first few quadrate and the following ones shortly triangular, gradually becoming quadrate again, but remaining much wider than long till near the end of the arm. A syzygy in the third brachial and another between the thirteenth and thirtieth; others at intervals of seven to seventeen joints.

The lower pinnules of the inner arms are generally rather smaller than those on the outer arms of each distichal group, and more especially than those on the outer arms of the rays. The first one may be 7 to 9 mm. long, with twenty to twenty-five joints, the lowest of which are rather wide. The second pinnule may have thirty joints, the first half of which are very stout, and reaches 10 or 15 mm. The third is sometimes nearly equal to it, but is more usually considerably smaller both in length and in stoutness, while its successor on the seventh brachial is always much smaller than the pinnule on the fifth.